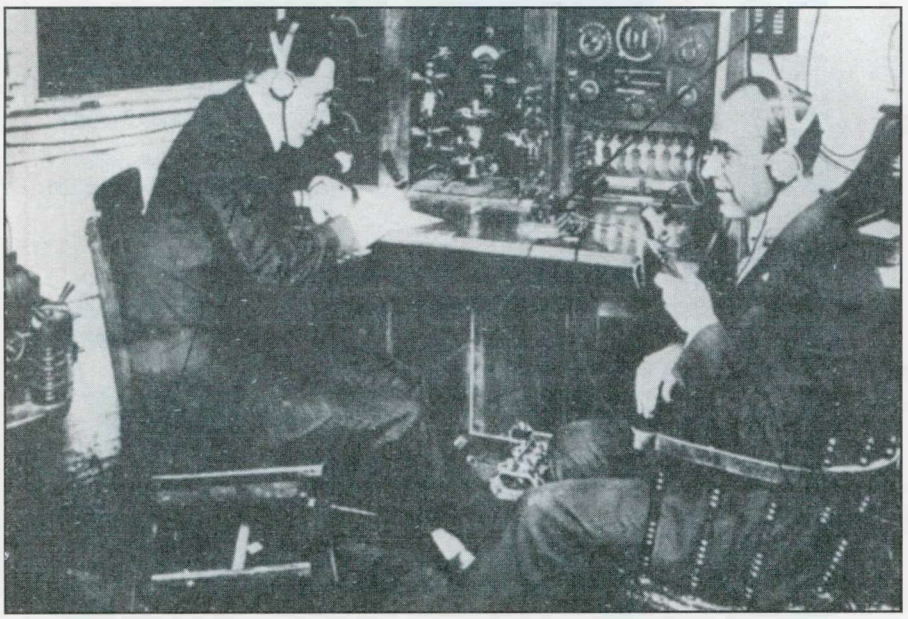
Station XWA: World's First Broadcaster?

Another Serious Contender For The Title

By Alice Brannigan

Radio broadcasting, as something distinctly different than early amateur or experimental one-way program transmissions, is most often cited as starting with the Harding-Cox election returns on November 2, 1920 from Westinghouse station KDKA, East Pittsburgh, Pennsylvania. KDKA was the successor to earlier transmissions begun on October 17, 1919 by Dr. Frank Conrad over his experimental station, 8XK, Wilkinsburg, Pennsylvania. Conrad was a Westinghouse engineer who had earlier played recorded music, sports results, and such over 8XK. In 1920, Westinghouse realized that a new class of buyers might be induced to purchase receiving equipment to enjoy this type of programming.

KDKA claims that on October 16, 1920, a license was applied for, and that KDKA's "first license" was issued on October 27, 1920. No official record or copy of that license seems to exist today. According to research by Broadcast Pro-File, government records show KDKA's regular broadcast license as having been issued a year later, on November 7, 1921. Moreover, government records also indicate KDKA's broadcasting license was the *eighth* one issued after WBZ received the first one on September 15, 1920, followed by WDY, WCJ, WJZ, WBL, WJX, and KQL. A number of other American stations, including KQW (now KCBS), KQV, WRUC, WWJ, WHA, etc., have also claimed they were the first true broadcast stations *per se*, and not simply adjuncts to early amateur or experimental operations. Note that early broadcast licenses also required stations to be able to transmit and receive telegraphy in case they received distress calls from ships at sea. Netherlands' station PCGG is claimed to have began broadcasting in November of 1919, and some say it was the first station.



This early photo of XWA shows the transmitter to the left, the receiver at the right, and a telegraph key in the desktop's center. The operator seated to the right is holding a microphone.

But, Wait A Minute!

Recently, we received an E-mail from reader Bill Farley, WA5FLG, that added an interesting aspect to the quest for broadcast primacy. Bill wrote that several Canadians have told him station XWA was the "first station anywhere." Bill asked if we could look into these claims. Sounded good to us!

Westinghouse wasn't the only company that speculated the public might be interested in hearing broadcasts and buying receivers. There was also the Marconi Wireless Telegraph Company of Canada, Ltd. They hit upon this as early as 1919, and realized they would need to actually put a station on the air in order to develop this new market.

Applying to the Canadian Dept. of Naval Services for a transmitting permit, Canadian Marconi was granted a license during the summer of 1919. The station was authorized for two-way voice and telegraphy operations and assigned the call letters XWA. Mr. A.H. Morse was appointed the station's manager by Marconi . The XWA studio was an unfurnished room on the top floor of the Marconi factory on Williams Street, Montreal, Quebec. This was in an area known as Griffintown, a low-cost housing development. On hot days, with the XWA studio windows open, area residents could hear the programs without the need of radios.

XWA's first programming efforts, to be frank, were not very creative. They were akin to the TV test patterns given so much air time during the late 1940s and early 1950s. In XWA's case, technicians repeatedly droned into the microphone things like, "XWA testing," followed by counting from one to ten. According to legend, at some point one of the technicians either ran out of patience or out of breath, and came up with a better idea.

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He went to a music shop on St. Catherine Street W. and made a deal with the owner. In exchange for providing XWA with a record player and a stack of recordings, the station was to mention the store's name over the air. This attracted similar exchange offers from piano companies and music publishers.

Many musical performers showed up in person up at the XWA studios to sing or play instruments. The local press reported these concerts.

As of late 1921, the radio broadcasting service was formally created in both the U.S. and Canada. At that point, XWA was reassigned new call letters, CFCF, to conform with the new broadcast callsign format instituted in Canada. CFCF operated on 681 kHz. During 1922, Canadian Marconi opened three additional stations (all on 681 kHz). These were CFCB in Vancouver, B.C.; CFCE in Halifax, N.S., and CHCB in Toronto, Ont.

In the summer of 1925, CFCF was running 2 kW and located in the Cement Bldg., Phillips Square, Montreal. By the spring of 1926, CFCF's power level was reduced to 500 watts, but by summer they shifted to 730 kHz and were able to run the power up to 1650 watts. The station had moved to new studios at 1231 St. Catherine St. W., and located its transmitter to the roof of the Mount Royal Hotel on Peel Street. CFCF changed frequencies to 1030 kHz in 1929, then cut its power back to 500 watts in 1931. By the mid-1930s, CFCF was operating on 600 kHz with 400 watts, then 500 watts. The power was increased to 5 kW in the early 1950s. After many decades of operating CFCF, Canadian Marconi sold the station. It presently has the call letters CIQC and operates from Verdun, Que. (a Montreal suburb), with 10 kW days (5 kW nights) on 600 kHz.

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A Toronto newspaper carried this ad for station 9BA in September of 1921. It noted that the station broadcast concerts daily on a wavelength of 300 meters (1000 kHz).

On To Toronto

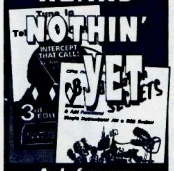
Another very early Canadian station was experimental 9BA in Toronto, Ontario. This station was owned by A.L. Ainsworth, 2 Meagher Avenue. It was located on the sixth floor of the Home Furnishings Building. According to an ad in *The Toronto Globe* of September 20, 1921, station 9BA broadcast T. Eaton Company Concerts daily on 1000 kHz. These concerts were broadcast between 4 and 4:30 p.m., and Saturdays from noon to 1 p.m. As a bonus, the station sold all types of wireless apparatus and also gave free advice about communications problems. Interested parties were invited to contact 9BA on 1000 kHz via CW any day between 4:30 and 5 p.m. Later, 50 watt Toronto station CJCD was owned by the T. Eaton Company and may possibly have evolved from 9BA.

Problems Arise

Broadcasting in Canada had a rather hard time getting started. In 1922–23, there were 36 licensed broadcast stations in Canada, with a total of 127 by the start

of 1926. But by 1927, fewer than 75 stations remained in operation. The rest had either gone inactive or were completely dark. Those still operating were only in larger cities and owned by radio equipment dealers and manufacturers, universities, newspapers, provincial governments, and the Canadian National Railroad. Those that had fallen silent were, for the most part, smaller privately owned and club stations, and stations in rural areas. So *wha hoppen*?

YOU AIN'T HEARD NOTHIN' YET



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"In Canada, until the late 1920s, radio commercials were not allowed."

In the U.S., radio was an overwhelming and instant sensation. By December of 1921, 20 American stations were licensed, but a mere four months later there were 200 on the air. By 1923, 500 stations were operating, and listeners with cheap receivers had trouble separating one station from another. In 1926, most Canadian stations were running 500 watts, with only one using 5 kW. On the other hand, in the U.S., there were plenty of 1 kW stations, plus some pumping out as much as 10 kW or 20 kW.

Not Enough Channels

The biggest problem facing early Canadian broadcasters was the very fact that radio had become so popular in the U.S. The crush of powerful American stations gobbled up and dominated the available frequencies. As a result, Canadian stations were eventually squeezed onto relatively few channels. For instance, in the early days of 1922, Toronto had eight stations operating on six frequencies. But by 1926, Toronto had all of its nine stations (CFCA, CHIC, CHNC, CJBC, CJSC, CKCL, CKNC, CNRT, and CJCD), forced to share time on one single frequency, 840 kHz! Except for 50-watt CJCD, the others were authorized for 500 watt operation. With all nine using 840 kHz, four Toronto stations (CHIC, CJBC, CJSC, and CNRT) saved money by not bothering to own transmitters. They simply leased air time on the transmitters of other locals during those stations' quiet hours. Stations not owning transmitters that leased the facilities of other broadcasters were known as *phantom* or *ghost stations*.

Another problem was that American stations were raking in a harvest of cash from sponsors and purchasing big name talent. But in Canada, until the late 1920s, radio commercials were not allowed. That meant privately-owned Canadian stations had to sustain the entire costs of their programming. This resulted in an abundance of non-professional entertainment, scratchy phonograph records, cultural lectures, and other low-cost program fare that failed to attract listeners. Canadian audiences preferred American stations because they were plentiful, and offered more interesting programs than most Canadian broadcasters.

Finally, A Solution

It wasn't until these early problems could be ironed out that broadcasting in Canada could fully develop. The U.S. passed the Radio Act of 1927 that created the Federal Radio Commission. The FRC sought to end the chaos that broadcasting had become in the U.S. It defined the broadcast band in terms of kilocycles rather than meters, and established a standardized designation for channels based upon frequency rather than wavelength. By 1928, the FRC had declared many American stations as unnecessary and removed them from the air. Nearly all others were reassigned to new frequencies, many with their night hours eliminated. When the dust settled, the number of American stations had been cut from nearly 600 to less than 400. Canadian broadcasters were immediately given relief with the guarantee of additional channels.

In 1928, the Canadian government had undertaken its own study to recommend a new system of broadcasting. The study concluded that the glut of commercial programs from the U.S. tended to "mold the minds of the young people in the home to ideals and opinions that are not Canadian." This resulted in the later creation of the Canadian Broadcasting Corporation. The CBC was a government-subsidized entity created with the strong belief that government ownership could secure Canadian programming in the face of the numerous and powerful radio influences of U.S. broadcasters.

By the end of 1928, Toronto had eleven stations using four local frequencies instead of only one. Canada then had a number of 5 kW stations by then, plus a 10 kW station.

So Who's On First?

Obviously, XWA was a historic and very early broadcaster, quite possibly the first one. Seems to us that such claims must be publicized and given equal consideration along with all others claiming that unique distinction.

Please let us hear from you! Our snail mail address is Alice Brannigan, *Popular Communications*, 25 Newbridge Road, Hicksville, NY 11801. Reach us directly by E-mail at <Radioville@juno.com>. Hope you'll join us here next time. 'Til then, see you in Radioville! ■